

CEN Reference: BT N 14351

Draft BT C112/2023

CENELEC Reference: BT175/DG13892/DV

Simultaneous circulation to CEN and CENELEC TECHNICAL BOARDS

BT by correspondence CENELEC Agenda item: 5.1.16

For vote in line with IR2 Clause 6.1.4

Issue date: 2023-06-28 **Deadline:** 2023-09-19

SUBJECT

CEN-CLC/JTC on Digital Product Passport (DPP) - Creation

BACKGROUND

On 2023-06-26, DIN and DKE submitted a proposal for the creation of a new Joint CEN and CENELEC Technical Committee (CEN-CLC/JTC) on Digital Product Passport (DPP) to CCMC (see Annex). DIN is committed to provide the secretariat of the proposed Joint Technical Committee.

The Digital Product Passport (DPP), as a tool to provide detailed information of a product, e.g. origin and composition, has already been mentioned in the European Green Deal in 2019, the European Circular Economy Action Plan (CEAP), the Battery Regulation in 2020, and the Ecodesign for Sustainable Products Regulation (ESPR) in 2022. The DPP is considered one of the essential pillars to support the implementation of the ESPR Regulation.

Furthermore, the DPP is supposed to support three important policy objectives of the European Commission: (1) increase environmental sustainability, (2) promote circularity and (3) support legal compliance. Hence, implementing interoperable DPP systems and a DPP data structure will allow transparency and quality through value chains and strengthen the European Market resilience.

CEN and CENELEC received, in May 2023, a draft Standardization Request on the Digital Product Passport requesting harmonized standards to be developed in the areas of 'unique identifiers', 'data carriers', 'links between physical product and digital representation', 'access rights management', 'interoperability', 'data authentication' and 'data security'.

DIN and DKE are proposing the establishment of the CEN-CLC/JTC XXX 'DPP' to set up a necessary standardization infrastructure and to coordinate and execute the work, while taking upcoming relevant political initiatives into account.

A detailed proposal including the initial work programme and structure of the new CLC-CEN/JTC is presented in Annex.

By BT 006/2020 and D164/004, CEN and CENELEC BTs respectively decided that the following criteria are to be met for creation a CEN-CLC/JTC:

- 12-week consultation by correspondence;
- Vote according to IR2;
- At least 5 countries committed to participate.

Consequently, Members are requested to state explicitly whether they are committed to participate in the work:

- in CEN by means of the commenting field provided in the BT-balloting tool;
- in CENELEC by uploading a reply on the Collaboration Platform.

PROPOSAL(S)

BT,

- having considered the DIN and DKE proposal for a new field of technical activity on 'Digital Product Passport' as described in Annex;
- considering that the following Members have expressed commitment to participate:
 <Members>
- decided to create a new CEN-CLC/JTC XXX with the following preliminary title and scope:

Title: Digital Product Passport (DPP)

<u>Scope</u>: Development of deliverables for the deployment of the Digital Product Passport (DPP) and the data delivering ecosystem while ensuring cross sectoral and cross system interoperability.

The new JTC does not develop sector specific standards and standards to be used for DPP-system or DPP-data which are already covered by the scope of other CEN and CENELEC TCs.

- allocated the secretariat of CEN-CLC/JTC XXX to DIN;
- asked the new CEN-CLC/JTC XXX to submit its final title and scope for BT approval, following its first kick-off meeting.

2023-06-26 - CMU



PROPOSAL for a NEW FIELD OF TECHNICAL ACTIVITY		
Date of circulation	CEN/TC / SC N	
	(where appropriate)	
Secretariat	CENELEC/TC / SC (Sec)	
	(where appropriate)	
Type of technical body proposed (TC / SC / BTTF)	CEN-CLC/JTC	

IMPORTANT NOTE: Incomplete proposals risk rejection or referral to originator.

The proposer has considered the guidance given in Annexes 1 and 2 during the preparation

Proposal (to be completed by the proposer)

Title of the proposed new subject

(The title shall indicate clearly and unambiguously, yet concisely, the new field of technical activity which the proposal is intended to cover.)

Digital Product Passport (DPP)

Scope statement of the proposed new subject

(The scope shall precisely define the limits of the new field of technical activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)

Development of deliverables for the deployment of the Digital Product Passport (DPP) and the data delivering ecosystem while ensuring cross sectoral and cross system interoperability.

The new JTC does not develop sector specific standards and standards to be used for DPP-system or DPP-data which are already covered by the scope of other CEN and CENELEC TCs.

Purpose and justification for the proposal.

The development of an interoperable Digital Product Passport (DPP) system, a DPP data structure as well as the resulting ecosystem is a central catalyst for the digital and green transformation. The DPP approach will improve transparency and quality through value chains and will contribute to geostrategic resilience of Europe.

CONCRETE POLITICAL ISSUES

In December 2019 the European Green Deal (COM(2019) 640 final) addressed "... an electronic product passport could provide information on a product's origin, composition, repair and disassembly options, and end-of-life handling ...". In March 2020 the European Circular Economy Action Plan (CEAP) (COM(2020) 98 final) called for "... mobilising the potential of digitalisation of product information, including solutions such as digital passports". In December 2020 a Battery Pass was addressed as a DPP in the proposal for a Battery Regulation (COM(2020)798 final). The proposal for an Ecodesign for Sustainable Products Regulation (ESPR) (COM(2022) 142 final), March 2022, sets the DPP as one of its essential pillars. To support the ESPR and referring also to the Battery Regulation a draft Standardization Request on DPP was submitted by the EU Commission to CEN and CENELEC. The latest version of this Standardization Request(circulated as BT N 14233 and BT175/DG13763/INF) requests the development of standards for a harmonized DPP-System by 31. December 2025 addressing:

- unique identifiers
- data carriers
- \bullet $\,$ links between physical product and digital representation, look-up mechanism
- access rights management
- interoperability (technical, semantic, organisation), including data exchange protocols and formats and data processing (introduction, modification, update)
- data storage and data persistence
- data authentication, reliability, integrity
- data security and privacy

A TC coordinating the execution of this upcoming Standardization Request while also taking into account relevant political initiatives is needed.

EXPECTABLE POLITICAL ISSUES

DPP is also being contemplated in several other political transformation discussions, on national, European and international level – not least regarding all mandatory product information. Most relevant for the justification of the proposed JTC is the strengthening discussion about sectoral but also horizontal regulations/directives of the New Legislative Framework (NLF) (e.g. the Revision of the Directive on safety of toys or the Cyber Resilience Act). Moreover the political discussion includes also the relevance of a DPP regarding the general Digitization of the NLF and the Quality Infrastructure as already implied by the ESPR regarding the market surveillance.

ECONOMIC ISSUES

Like the various activities in the political dimension already imply, there are several motivations for a DPP. These are not only political. The demand for an DPP (in sense of a dataset for products and interoperable data-flow between market actors) arises also from a fundamental interest of the economy and industry and their digitalisation efforts. In this respect digital provision of mandatory product information is only one aspect for the economy. But the enrolment of an interoperable system and ecosystem of DPP will be a catalyst on the digital interaction of business. This requires a data delivering ecosystem in the supply chain.

Both the political and economical perspective need a cross sectoral and cross system interoperable DPP system and ecosystem. This will have a fundamental impact on economical processes - affecting the whole value chain. In addition to legal and political requirements, various aspects need to be considered, e.g.

- various stakeholders along the value chain and product life cycle (from the supplier till the recycler)
- various affected branches, sectors, product groups which are successively increasing
- expert groups of the several technical modules of a DPP system
- further innovations and regulations (e.g. all mandatory product information might be included)
- requirements of the business partners and the link between their DPP systems, e.g. regarding data-flow (e.g. due to circularity issues) and the handling of data (e.g. via restricted areas) only foreseen for special target groups (e.g. authorities, certified recycler).

There are a broad range of approaches, implementations, systems and standards, already existing, partially existing and under development, which need to be taken into account in the new JTC and which need to be used for a realistic and efficient rollout approach.

Especially because there is already broad base, an overarching JTC well coordinating and liaising with relevant existing TCs is needed.

Is the proposed new subject actively, or probably, in support of European legislation or established public policy?

If Yes, indicate if the proposal is
• in relation to EC mandate(s):
Upcoming Standardisation Request on DPP
• in relation to EC Directive(s)/Regulation(s):
Proposal for an Ecodesign for Sustainable Products Regulation (ESPR) ($\underline{\text{COM}(2022)}$ 142 final), Proposal for a Battery Regulation ($\underline{\text{COM}(2020)798}$ final) regarding the DPP-System
• in relation to other legislation or established public policy:
Legislation regarding voluntary or mandatory product information

Proposed initial programme of work

The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall therefore show the relationship between the subject proposed.

Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, terminology, characteristics, other requirements, data to be supplied, test methods, performance requirements, etc.). Supplementary justification may be combined with particular items in the programme of work (e.g. output from a research project).

The proposed programme of work shall also suggest priorities, target dates and the most appropriate type of deliverable (e.g. EN, TS) for each item

The deployment of digital product passport and the regarding ecosystem, will require the development, coordination and accumulation of a range of standards. An initial mapping of the existing relevant standards (StandICT.eu Landscape of standards for the DPP) shows that quite a few topics require adoption of existing ISO and IEC or ISO/IEC standards, others require developing new standards. But either way there is currently no European TC which has an integrated scope of the topics for establishing DPPs, neither one taking into account a comprehensive approach for interoperability (inclusion oriented). Several European TCs cover topics, but mostly induvial or just partially. A strong collaboration with them likewise the international ones is in the focus of the work program of the JTC (see below).

The initiative aims at the fulfilment of the expected European Standardization Request on DPP, securing the alignment with European regulation and the support of the transition to a circular economy.

It covers the areas of the Standardisation Request:

- unique identifiers
- data carriers
- links between physical product and digital representation, look-up mechanism
- access rights management
- interoperability (technical, semantic, organisation), including data exchange protocols and formats and data processing (introduction, modification, update)
- data storage and data persistence
- data authentication, reliability, integrity
- data security and privacy

In order to avoid duplication of work at the European and international level and to benefit from the structures of existing bodies, the following set up and work program under the JTC is proposed:

Set Up

CAG - Chair/Strategic Advisory Group

The needed interaction with several stakeholder groups and especially TC's within CEN and CENELEC, ISO and IEC as well as ETSI and other liaison organizations and strategic groups/forums, leads to a significantly higher coordination effort. So the main tasks of a CAG will be to support, advise, coordinate, plan and assist in steering the work of the JTC and its WGs. Moreover the coordination of ongoing activities will facilitate efficiency in standardization related initiatives (e.g. <u>CIRPASS</u>), as well as sharing of best practice. In its coordinating capacity, the group can arrange alignment meetings with relevant groups to enable a coherent foundation for standardization activities at the European level.

Work Program

"Metastructure for an interoperable DPP-System"

(interoperability of sector- and system specific approaches)

The main work package will address the development of a Metastructure for an interoperable DPP-System while focusing on the execution of the upcoming Standardization Request. It should include an interoperability of sector and system specific approaches and considers the different aspects und utilizations of a DPP.

The following structure of tasks/work areas should be seen as a first suggestion and a basis for the later clustering of working groups:

Interoperability Framework, Principles, Terminology

- Technical coordination and alignment
- Based on Integrated Interoperability framework

- Architecture Framework (e.g. federated, distributed approach)
- Scope of DPP
- Evolvement
- Generic rules for DPP specialization (e.g. for different sectors)

Processes, Responsibilities & Policies

- Responsibilities and Rules
- Processes and Process Types (Value Stream and Information Flow)
- IT Governance (IT-Service-Management, incl. auditability)

IT-Services

- Identity and Access Management
- Data Distribution / Exchange and Data Provision/Integration
- Data Storage / Persistence
- Data Processing

Data

- Data Modelling Language (methodology and application guidelines)
- information model (data structure/formats)
- Protocols
- Data Models
- Data quality requirements
- rules and methods for setting up specific DPP Data Models

Identification and data carrier

- Unique Identifiers
- Data Carriers
- Implementation/Application Guideline

Security

- Policy Management and enforcement
- Security Infrastructure

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing CEN, CENELEC, ISO and IEC deliverables.

The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization, or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

The following TCs deal with related tasks. However, none of them address the exact tasks, which the JTC is proposed to deal with.

Technical committees in CEN-CLC with an ICT-focus (non-exhaustive list)

- CEN/TC 224 Personal identification and related personal devices with secure elements, systems, operations and privacy in a multi sectorial environment
- CEN/TC 225 AIDC Technologies
- CEN/TC 251 Health informatics
- CEN/TC 294 Communication systems for meters
- CEN/TC 428 ICT professionalism and Digital competences

- CEN/TC 434 Electronic invoicing
- CEN/TC 440 Electronic Public Procurement
- CEN/TC 468 Management and preservation of digital content
- CLC/SR 3D Data sets for libraries
- CLC/TC 21X Accumulators, Primary cells and Primary Batteries
- CLC/TC 65X Industrial-process measurement, control and automation
- CLC/TC 111X Environment
- CEN-CLC/JTC 19 Blockchain and Distributed Ledger Technologies
- CEN-CLC/JTC 13 Cybersecurity and data protection
- CEN-CLC/JTC 21 Artificial Intelligence

Other relevant CEN-CLC(-ETSI) groups

- CEN-CENELEC Strategic Advisory Body on Environment (SABE)
- CEN-CENELEC Ecodesign Coordination Group (Eco-CG)
- CEN-CENELEC-ETSI Coordination Group Smart Manufacturing

Relevant ISO/IEC committees (non-exhaustive list)

- ISO/TC 59/SC 13 Organisation and digitalisation of information about buildings and civil engineering works, including building information modelling (BIM)
- IEC/SC 3D Classes, Properties and Identification of products Common Data Dictionary (CDD)
- IEC/TC 21 Secondary cells and batteries
- IEC/TC 65 Industrial-process measurement control and automation
- IEC/SC 65E Devices and integration in enterprise systems
- IEC/TC 111 Environmental standardization for electrical and electronic products and systems
- ISO/TC 184/SC 4 Industrial data
- ISO/TC 292/WG 4 Authenticity, Integrity and Trust for products and documents
- ISO/TC 307 Blockchain and distributed ledger technologies
- ISO/TC 323 Circular Economy
- ISO/IEC JTC1/SC 17 Cards and security devices for personal identification
- ISO/IEC JTC1/SC 27 Information security, cybersecurity and privacy protection
- ISO/IEC JTC1/SC 27/WG 5 Identity Management and Privacy Technology
- ISO/IEC JTC1/SC 31 Automatic identification und Data capture techniques
- ISO/IEC JTC1/SC 31/WG 2 Data Structure
- ISO/IEC JTC1/SC 32 Data management and interchange
- ISO/IEC JTC1/SC 38 Cloud computing
- ISO/IEC JTC1/SC 41 Internet of Things and Digital Twin
- ISO/IEC JTC1/SC 42 Artifical Intelligence

A listing of relevant existing documents at the international, regional and national levels.

Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source, and should be accompanied by an indication of their significance.

At this point, the research "A Landscape of Standards for the Digital Product Passport (EUOS TWG)" compiled by a Technical Working Group from Stand.ICT should be referenced. The landscape lists 186 international and European standards from recognised standardisation bodies - according to EC 1025/2012 directive - and further 78 standards from other standards developing organizations.

(https://www.standict.eu/digital-product-passport-standards-report)

Known patented items

Yes If "Yes", see CEN-CENELEC Guide 8 and provide full information in an annex

A simple and concise statement identifying and describing relevant sized enterprises) in particular those who are immediately affects each benefit from or be impacted by the proposed deliverable(s)		
 Industry and commerce including SME's and manufacturer, service provider and user of 		
- Government		
- Consumers		
- Labour		
- Academic and research bodies		
- Non-governmental organisations (NGO)		
- Standards application business (e.g. testi	ng laboratories, certification bodies)	
Liaisons: A listing of relevant external European or international organizations or internal parties (other CEN, CENELEC, ETSI, ISO and/or IEC committees) to which a liaison should be established (in the case of ISO and IEC committees via the Vienna or Dresden Agreements). A broad activity of liaisons is envisaged, beyond those mentioned here. These further liasions should be discussed with the relevant TCs addressed above	Joint/parallel work: Possible joint/parallel work with: CEN (please specify committee ID) CENELEC (please specify committee ID) ISO (please specify committee ID) IEC (please specify committee ID) Other (please specify)	
 proposed CEN/TC Circular Economy CEN-CENELEC Strategic Advisory Body on Environment (SABE) CEN-CENELEC Ecodesign Coordination Group (Eco-CG) CEN-CLC-ETSI Coordination Group Smart Manufacturing 		
Name of the Proposer (include contact details)		
Am DIN-Platz Burggrafenstr. 6	Contact person: Benjamin Helfritz E-Mail: <u>benjamin.helfritz@din.de</u> Tel: +49 30 2601-2791	
An expression of commitment from the proposer to provide the If the proposal is accepted, DIN is comm CEN-CLC/JTC and all resources necessary to su	itted to provide the secretariat of the new	
Signature of	the proposer	
/	EN/BT member	
Annex(es) are include □	ed with this proposal (give details)	

Informative Annex 1 "Principal categories of market needs"

- Consumer protection and welfare
- Environment
- Innovation
- Support to:
 - -public policy
 - -European legislation/regulation
- Market access/barriers to trade, i.e. enhancing the free movement of:
 - services
 - goods
 - people
- Interoperability
- Health/Safety
- Terminology

Informative Annex 2 "Principal categories of stakeholders"

- Industry and commerce,

where particularly appropriate, to be identified separately as

- Large enterprises (those employing 250 staff or more)
- Small and medium sized enterprises (SME), (those employing 250 staff or fewer)
- Government
- Consumers

including those organizations representing interests of specific societal groups, e.g. people with those needing other particular consideration)

disabilities or

- Labour
- Academic and research bodies
- Non-governmental organisations (NGO),

including organizations representing broad or specific environmental interests

- Standards application business (e.g. testing laboratories, certification bodies)

Sometimes it is valuable also identify the immediate affected stakeholders from industry and commerce in terms of their position in a product value chain, as follows:

- Supplier
- Manufacturer
- Intermediary (e.g. warehousing, transport, sales)
- Service provider
- User of the product or service
- Maintenance / disposal

NOTE: 'Immediately affected stakeholders' are considered to be those who, within the context of the proposal, would be in a position to implement the provisions of the intended standard(s) into their products, services or management practices.